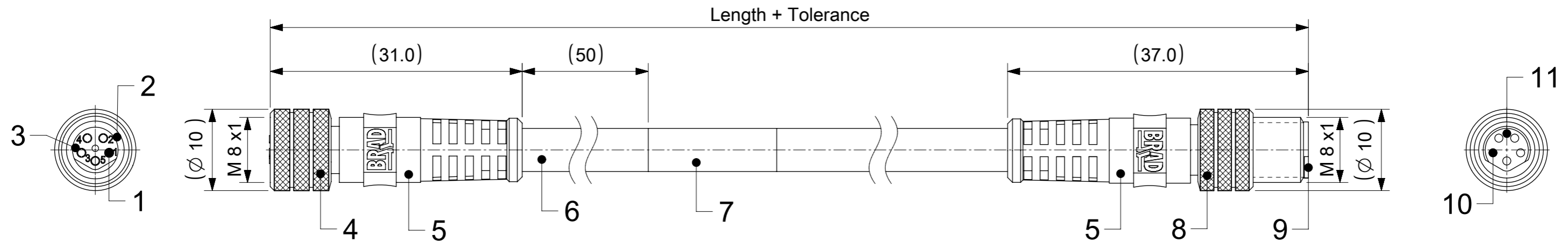
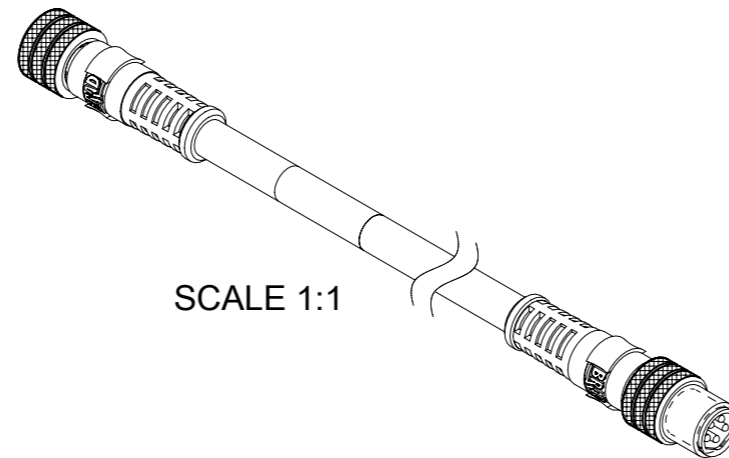


# FEMALE PLUG M8 STRAIGHT TO MALE PLUG M8 STRAIGHT



**NOTES:**

- RATED VOLTAGE: 3 contacts 60V AC/DC  
4 and 5 contacts 30V AC/DC
- CURRENT RATING: 3, 4, 5 contacts 3A
- PROTECTION CLASS: IP 67 in mated and locked position.
- TEMPERATURE: SEE CABLE INFORMATION
- INSULATION RESISTANCE: 10<sup>8</sup> Ω MIN.
- MATING CYCLES: MIN. 100



**CONTACTS POSITION FRONT VIEW:**

	3 CONTACTS		4 CONTACTS		5 CONTACTS	
FEMALE						
MALE						
CONNECTIONS	PIN	WIRE	PIN	WIRE	PIN	WIRE
	1	BROWN	1	BROWN	1	BROWN
	3	BLUE	2	WHITE	2	WHITE
	4	BLACK	3	BLUE	3	BLUE
			4	BLACK	4	BLACK
				5	GREY	

CODING ACCORDING TO IEC 61076-2-104

**FOR OPTIONS SEE - NUMERICAL CODE - ON SHEET 2**

ITEM	QTY.	DESCRIPTION	MATERIAL	FINISH
11	1	INSERT MALE BLACK	TPU	---
10	3 / 4 / 5	CONTACT M8 MALE	BRASS	SELECTIVE Au OVER Ni
9	1	SLEEVE	BRASS	NICKEL
8	1	COUPLING NUT M8 MALE	BRASS	NICKEL
7	1	LABEL YELLOW	VINYL	---
	-	PRINTING FOR CABLES lxx	---	---
6	-	CABLE	SEE SHEET 2	---
5	-	OVERMOULDING BLACK	TPU	---
4	1	COUPLING NUT M8 FEMALE	BRASS	NICKEL
3	1	INSERT FEMALE BLACK	TPU	---
2	1	O-RING RED	FKM	---
1	3 / 4 / 5	CONTACT M8 FEMALE	BRASS	SELECTIVE Au OVER Ni

FUNCTIONAL SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	CURRENT REV DESC: CORRECTION TYPO			
	DIMENSION UNITS: <b>mm</b> SCALE: <b>2:1</b> GENERAL TOLERANCES (UNLESS SPECIFIED) ANGULAR TOL ± 1.0° 4 PLACES ± 3 PLACES ± 2 PLACES ± 0.05 1 PLACE ± 0.3 0 PLACES ± 0.5	EC NO: 727617 DRWN: RSILLER 2022/11/08 CHK'D: THAERDT 2022/11/09 APPR: THAERDT 2022/11/09			
DIVISIONAL SYMBOLS	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	THIRD ANGLE PROJECTION	DRAWING: <b>A3-SIZE</b>	SERIES: <b>120087</b>	DOCUMENT NUMBER: <b>1200878240</b>
					DOC TYPE: PSD   DOC PART: 000   REVISION: A16
		MATERIAL NUMBER: SEE PART LIST	CUSTOMER: GENERAL MARKET	SHEET NUMBER: 1 OF 4	

# ENGINEERING NO. - NUMERICAL CODE (Available parts see PART LIST table. Other parts available upon request).

## OPTIONS

4 4 X 0 3 0 X X X X X X X X

44=Nano-Change  
M8x1  
Double ended

Contacts:  
3=3 Contacts  
4=4 Contacts  
5=5 Contacts

Heads style:  
030=Plug Female Straight  
to Plug Male Straight

Cable type: See Table

Units:  
M=Meter  
C=Centimeter

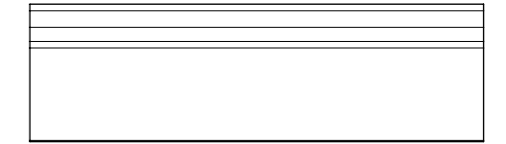
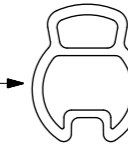
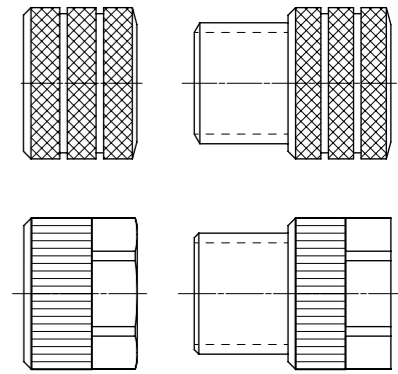
Length  
Examples:  
005=0.5 unit  
010=1 unit  
100=10 unit

Overmold color:  
Blank (Standard)=Black  
A=Grey / G=Black / Y=Yellow

Coupling Nut:  
Blank (Standard)=Knurled Brass Ni Plated  
9=Knurled / Hexagonal SW9 Brass Ni Plated

H= 2 pcs. of I/D Carrier PVC Transparent  
(Cables lxx & P82 always with 2 pcs. of  
I/D Carrier)

COUPLING NUT  
FEMALE MALE



## CABLE INFORMATION (for more information see Cable Data Sheet).

CABLE TYPE	NO. OF WIRES	CROSS SECTION	CABLE JACKET	UL	CSA	STATIC: TEMP. / BENDING RADIUS	DYNAMIC: TEMP. / BENDING RADIUS	DRAG CHAIN	SHIELD
E02	3 / 4 / 5	0.25 mm <sup>2</sup>	PVC BLACK	UL 2464/1729	C22.2 I/II A/B 80°C/300V	-30°C to +80°C, >10xO.D.	-10°C to +80°C, >15xO.D.	-	-
H08	3 / 4 / 5	0.25 mm <sup>2</sup>	PUR BLACK LS0H	UL 21198/10493	C22.2 I/II A/B 80°C/300V	-40°C to +80°C, >5xO.D.	-25°C to +80°C, >10xO.D.	2 000 000 cycles at 20°C, Temp. range +5°C to +60°C	-
I02	3 / 4	0.25 mm <sup>2</sup>	PVC CEI GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	-
P02	3 / 4 / 5	0.25 mm <sup>2</sup>	PUR / PVC BLACK	-	-	-30°C to +80°C, >7xO.D.	-5°C to +80°C, >15xO.D.	-	-
P82	3	0.34 mm <sup>2</sup>	PUR IRR ORANGE	-	-	-50°C to +105°C, >5xO.D.	-40°C to +105°C, >7.5xO.D.	-	-
H70	5	0.25 mm <sup>2</sup>	PUR BLACK	-	-	-40°C to +80°C, >5xO.D.	-25°C to +80°C, >10xO.D.	2 000 000 cycles at 20°C, Temp. range +5°C to +60°C	-

## CABLE LENGTH TOLERANCES





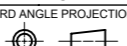
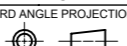
OVER	UP TO AND INCLUDING	TOLERANCES
0	305mm	+19mm
305mm	915mm	+45mm
915mm	1830mm	+56mm
1830mm	3660mm	+89mm
3660mm	7320mm	+165mm
7320mm	14640mm	+317mm
14640mm	30500mm	+610mm
30500mm	>	+2% of finished length

FUNCTIONAL SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	CURRENT REV DESC: CORRECTION TYPO		<b>molex</b>																																			
	<table border="1"> <tr> <th>FUNCTIONAL SYMBOLS</th> <th>DIMENSION UNITS</th> <th>SCALE</th> </tr> <tr> <td><math>\nabla_A = 0</math></td> <td>mm</td> <td>2:1</td> </tr> <tr> <td colspan="3">GENERAL TOLERANCES (UNLESS SPECIFIED)</td> </tr> <tr> <td><math>\nabla_E = 0</math></td> <td colspan="2">ANGULAR TOL <math>\pm 1.0^\circ</math></td> </tr> <tr> <td><math>\nabla_F = 0</math></td> <td colspan="2">4 PLACES <math>\pm</math></td> </tr> <tr> <td rowspan="4">DIVISIONAL SYMBOLS</td> <td>3 PLACES <math>\pm</math></td> <td rowspan="4">EC NO: 727617 DRWN: RSILLER 2022/11/08 CHK'D: THAERDT 2022/11/09 APPR: THAERDT 2022/11/09</td> </tr> <tr> <td>2 PLACES <math>\pm 0.05</math></td> </tr> <tr> <td>1 PLACE <math>\pm 0.3</math></td> </tr> <tr> <td>0 PLACES <math>\pm 0.5</math></td> </tr> <tr> <td colspan="3">DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS</td> <td>THIRD ANGLE PROJECTION</td> <td>DRAWING</td> <td>SERIES</td> <td>MATERIAL NUMBER</td> <td>CUSTOMER</td> <td>SHEET NUMBER</td> </tr> <tr> <td colspan="3"></td> <td></td> <td>A3-SIZE</td> <td>120087</td> <td>SEE PART LIST</td> <td>GENERAL MARKET</td> <td>2 OF 4</td> </tr> </table>	FUNCTIONAL SYMBOLS	DIMENSION UNITS				SCALE	$\nabla_A = 0$	mm	2:1	GENERAL TOLERANCES (UNLESS SPECIFIED)			$\nabla_E = 0$	ANGULAR TOL $\pm 1.0^\circ$		$\nabla_F = 0$	4 PLACES $\pm$		DIVISIONAL SYMBOLS	3 PLACES $\pm$	EC NO: 727617 DRWN: RSILLER 2022/11/08 CHK'D: THAERDT 2022/11/09 APPR: THAERDT 2022/11/09	2 PLACES $\pm 0.05$	1 PLACE $\pm 0.3$	0 PLACES $\pm 0.5$	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER					A3-SIZE
FUNCTIONAL SYMBOLS	DIMENSION UNITS	SCALE																																					
$\nabla_A = 0$	mm	2:1																																					
GENERAL TOLERANCES (UNLESS SPECIFIED)																																							
$\nabla_E = 0$	ANGULAR TOL $\pm 1.0^\circ$																																						
$\nabla_F = 0$	4 PLACES $\pm$																																						
DIVISIONAL SYMBOLS	3 PLACES $\pm$	EC NO: 727617 DRWN: RSILLER 2022/11/08 CHK'D: THAERDT 2022/11/09 APPR: THAERDT 2022/11/09																																					
	2 PLACES $\pm 0.05$																																						
	1 PLACE $\pm 0.3$																																						
	0 PLACES $\pm 0.5$																																						
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER																															
				A3-SIZE	120087	SEE PART LIST	GENERAL MARKET	2 OF 4																															



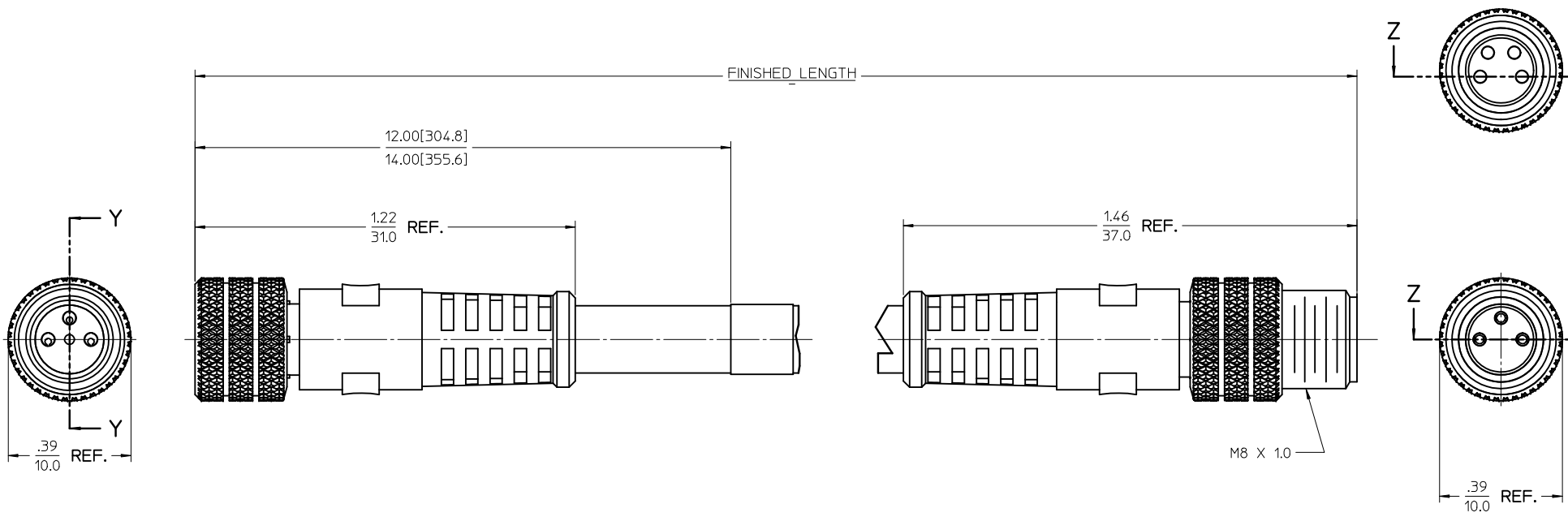
# PART LIST

No.	Molex PN	Engineering No.	Cable Length
162	1200879055	443030H08M060H	6m
163	1200879056	443030H08M020H	2m
164	1200879074	444030H08M060H	6m
165	1200879080	443030H08M060	6m
166	1200879081	443030H08M120	12m
167	1200879082	443030H08M140	14m
168	1200879083	443030H08M160	16m
169	1200879084	443030H08M180	18m
170	1200879085	443030H08M200	20m
171	1200879086	443030H08M220	22m
172	1200879087	443030H08M240	24m
173	1200878980	445030H08M030	3m
174	1200879090	443030H08M035H	3.5m

<b>FUNCTIONAL SYMBOLS</b>  = 0  = 0  = 0 <b>DIVISIONAL SYMBOLS</b>	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION DIMENSION UNITS: <b>mm</b> SCALE: <b>1:1</b>	CURRENT REV DESC: CORRECTION TYPO  EC NO: 727617 DRWN: RSILLER 2022/11/08 CHK'D: THAERDT 2022/11/09 APPR: THAERDT 2022/11/09	 CSE M8 M8 XP AC BC FE STR MA STR XM		
	GENERAL TOLERANCES (UNLESS SPECIFIED) ANGULAR TOL ± 1.0° 4 PLACES ±	INITIAL REVISION: DRWN: JMARSZALEK 2016/09/15 APPR: RSILLER 2017/01/11			
	3 PLACES ± 2 PLACES ± 0.05 1 PLACE ± 0.3 0 PLACES ± 0.5	THIRD ANGLE PROJECTION 	DRAWING: <b>A3-SIZE</b> SERIES: <b>120087</b> MATERIAL NUMBER: <b>SEE PART LIST</b> CUSTOMER: <b>GENERAL MARKET</b>	SHEET NUMBER: <b>4 OF 4</b>	
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRAWING: <b>A3-SIZE</b> SERIES: <b>120087</b> MATERIAL NUMBER: <b>SEE PART LIST</b> CUSTOMER: <b>GENERAL MARKET</b>	SHEET NUMBER: <b>4 OF 4</b>	

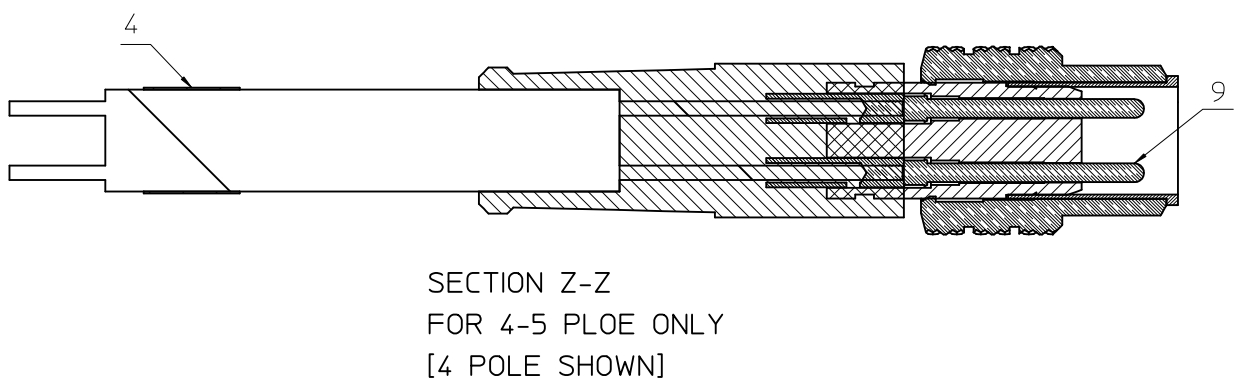
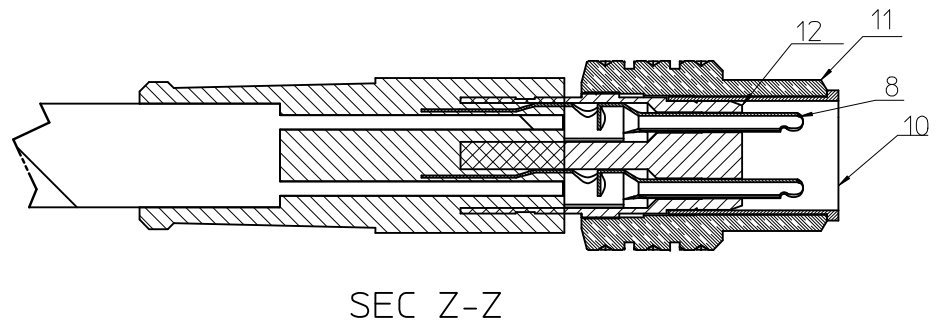
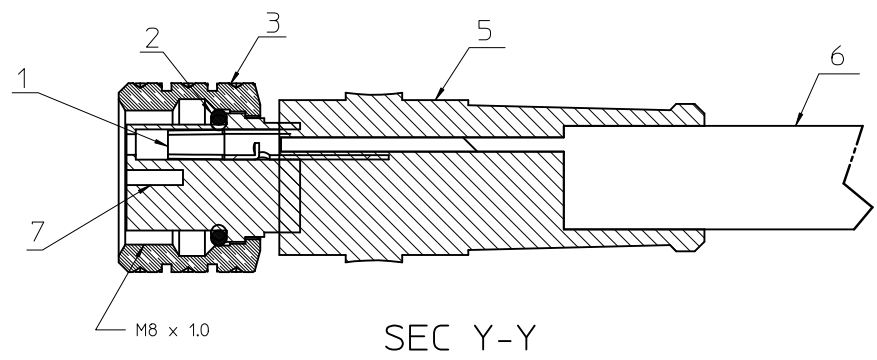
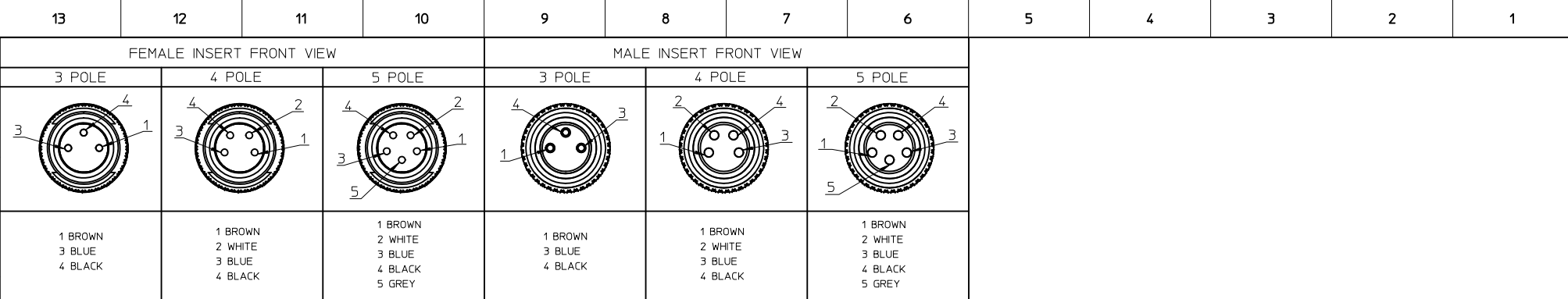
13 12 11 10 9 8 7 6 5 4 3 2 1

J I H G F E D C B A



<b>ENTER DESCRIPTION</b> EC NO: WEU2012-0001 DRW:RSCHLEBER 2011/07/06 CHK:DREISSNER 2011/07/13 APPR:CBURGER 2011/07/20	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION		
		4 PLACES	± .01	± .01	DRAWN BY	DATE	TITLE CSE M8 XP MA FE STR PUR PVC UN			
		3 PLACES	± .01	± .01	CHECKED BY	DATE				
		2 PLACES	± .01	± .01	APPROVED BY	DATE	MOLEX INCORPORATED			
1 PLACE	± 0.3	± .01	JFMURPHY	18/08/09						
ANGULAR ±1/2°		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE SHEET 3		DOCUMENT NO. SD-120028-001	SHEET NO. 1 OF 3			
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION										

1b\_frame\_C\_P\_AM\_T Rev. E 2006/04/15 12 11 10 9 8 7 6 5 4 3 2 1



<b>ENTER DESCRIPTION</b> EC NO: WEU2012-0001 DRAWNRSCHIEBER 2011/07/06 CHKDREI SSNER 2011/07/13 APPR:CBURGER 2011/07/20	<b>QUALITY SYMBOLS</b> =0 =0	<b>GENERAL TOLERANCES (UNLESS SPECIFIED)</b>		<b>DIMENSION STYLE</b> IN/MM		<b>SCALE</b> 5:1	<b>DESIGN UNITS</b> INCH	<b>THIRD ANGLE PROJECTION</b>			
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± .01 1 PLACE ± 0.3 ± ---	mm INCH ± --- ± --- ± --- ± .01 ± --- ± ---	DRAWN BY BWOODMAN	DATE 18/08/09	TITLE <b>CSE M8 XP MA FE STR PUR PVC UN</b>		<b>MOLEX INCORPORATED</b>			
		APPROVED BY JFMURPHY		DATE 18/08/09	MATERIAL NO. <b>SEE SHEET 3</b>		DOCUMENT NO. <b>SD-120028-001</b>				
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		ANGULAR ±1/2°		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

PART NUMBER	DESCRIPTION	FINISHED LENGTH	MATERIAL
1200878141	443030P02M006	0.6M +45MM -0 [1' 11" +1.8" -0]	PUR
1200878140	443030P02M010	1M +56MM -0 [3' 3" +2.2" -0]	PUR
1200878293	443030P02M015	1.5M +56MM -0 [4' 11" +2.2" -0]	PUR
1200878294	443030P02M020	2M +90MM -0 [6' 6" +3.5" -0]	PUR
1200878296	443030P02M030	3M +90MM -0 [9' 10" +3.5" -0]	PUR
1200878299	443030P02M040	4M +150MM -0 [13' 1" +6" -0]	PUR
1200878233	443030P02M050	5M +150MM -0 [16' 4" +6" -0]	PUR
1200878358	444030P02M006	0.6M +45MM -0 [1' 11" +1.8" -0]	PUR
1200878359	444030P02M010	1M +56MM -0 [3' 3" +2.2" -0]	PUR
1200878360	444030P02M020	2M +90MM -0 [6' 6" +3.5" -0]	PUR
1200878361	444030P02M030	3M +90MM -0 [9' 10" +3.5" -0]	PUR
1200870686	444030P02M040	4M +150MM -0 [13' 1" +6" -0]	PUR
1200878362	444030P02M050	5M +150MM -0 [16' 4" +6" -0]	PUR
1200870687	445030P02M006	0.6M +45MM -0 [1' 11" +1.8" -0]	PUR
1200281309	445030P02M010	1M +56MM -0 [3' 3" +2.2" -0]	PUR
1200878035	445030P02M020	2M +90MM -0 [6' 6" +3.5" -0]	PUR
1200870688	445030P02M030	3M +90MM -0 [9' 10" +3.5" -0]	PUR
1200878036	445030P02M040	4M +150MM -0 [13' 1" +6" -0]	PUR
1200281310	445030P02M050	5M +150MM -0 [16' 4" +6" -0]	PUR
1200875035	443030E02M006	0.6M +45MM -0 [1' 11" +1.8" -0]	PVC
1200878274	443030E02M015	1.5M +56MM -0 [4' 11" +2.2" -0]	PVC
1200280462	443030E02M050	5M +150MM -0 [16' 4" +6" -0]	PVC

SL.No	DESCRIPTION	MATERIAL	FINISH	FEMALE INSERT ASSEMBLY			MALE INSERT ASSEMBLY		
				3 POLE	4 POLE	5 POLE	3 POLE	4 POLE	5 POLE
1	CONTACT SOCKET	COPPER ALLOY	GOLD PLATED	3	4	5			
2	O-RING	VITON	RED	1	1	1			
3	COUPLING NUT	BRASS	NICKEL PLATED						
4	LABEL	PLASTIC FILM	BLACK/YELLOW	1	1	1	1	1	1
5	OVER MOLD	TPE	YELLOW						
6	CABLE, 24 AWG, 3 CONDUCTOR	PUR JACKET	BLACK	1			1		
	CABLE, 24 AWG, 3 CONDUCTOR	PVC JACKET	BLACK	1			1		
	CABLE, 24 AWG, 4 CONDUCTOR	PUR JACKET	BLACK		1			1	
7	CABLE, 24 AWG, 5 CONDUCTOR	PUR JACKET	BLACK			1			1
	INSERT FEMALE 3 POLE	PUR	BLACK	1					
	INSERT FEMALE 4 POLE	PUR	BLACK		1				
	INSERT FEMALE 5 POLE	PUR	BLACK			1			
8	STAMP & FORM CONTACT	COPPER ALLOY	GOLD PLATED				3		
9	SCREW MACHINE CONTACT	COPPER ALLOY	GOLD PLATED					4	5
10	SLEEVE	BRASS	NICKEL PLATED				1	1	1
11	COUPLING NUT	BRASS	NICKEL PLATED				1	1	1
12	INSERT MALE 3 POLE	PUR	BLACK				1		
	INSERT MALE 4 POLE	PUR	BLACK					1	
	INSERT MALE 5 POLE	PUR	BLACK						1

SPECIFICATION
Protection Class - IP67
Voltage Rating - 3 Pole/60V, 4+5 Pole/30V
Contact Current Rating - 3 Amps
Wires: 0.25mm <sup>2</sup> PVC/PUR

<b>ENTER DESCRIPTION</b> EC NO: WEU2012-0001 DRWNR: SCHIEBER 2011/07/06 CHKDR: ISSNER 2011/07/13 APPR: CJBURGER 2011/07/20	<b>QUALITY SYMBOLS</b> =0 =0	<b>GENERAL TOLERANCES (UNLESS SPECIFIED)</b>		<b>DIMENSION STYLE</b> IN/MM	<b>SCALE</b> 5:1	<b>DESIGN UNITS</b> INCH	<b>THIRD ANGLE PROJECTION</b>		
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± .01 1 PLACE ± 0.3 ± ---	mm INCH ± --- ± --- ± --- ± --- ± .01 ± --- ± 0.3 ± ---	DRAWN BY BWOODMAN	DATE 18/08/09	<b>TITLE</b> CSE M8 XP MA FE STR PUR PVC UN			
		ANGULAR ±1/2°		CHECKED BY RSTONE	DATE 18/08/09	<b>MOLEX INCORPORATED</b>			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPROVED BY JFMURPHY	DATE 18/08/09	MATERIAL NO. <b>SEE CHART</b>	DOCUMENT NO. SD-120028-001	SHEET NO. 3 OF 3	